

**ROCKCASTLE COUNTY REPORT  
OF  
ENDANGERED, THREATENED, AND SPECIAL CONCERN  
PLANTS, ANIMALS, AND NATURAL COMMUNITIES  
OF  
KENTUCKY**

**KENTUCKY STATE NATURE  
PRESERVES COMMISSION  
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# Kentucky State Nature Preserves Commission

## Key for County List Report

Within a county, elements are arranged first by taxonomic complexity (plants first, natural communities last), and second by scientific name. A key to status, ranks, and count data fields follows.

### STATUS

KSNPC: Kentucky State Nature Preserves Commission status:

N or blank = none    E = endangered    T = threatened    S = special concern    H = historic    X = extirpated

USESA: U.S. Fish and Wildlife Service status:

blank = none    C = candidate    LT = listed as threatened    LE = listed as endangered

SOMC = Species of Management Concern

### RANKS

GRANK: Estimate of element abundance on a global scale:

G1 = Critically imperiled

GU = Unrankable

G2 = Imperiled

G#? = Inexact rank (e.g. G2?)

G3 = Vulnerable

G#Q = Questionable taxonomy

G4 = Apparently secure

G#T# = Intraspecific taxa (Subspecies and variety abundances are coded with a 'T' suffix; the 'G' portion of the rank then refers to the entire species)

G5 = Secure

GH = Historic, possibly extinct

GNR = Unranked

GX = Presumed extinct

GNA = Not applicable

SRANK: Estimate of element abundance in Kentucky:

S1 = Critically imperiled

SU = Unrankable

S2 = Imperiled

S#? = Inexact rank (e.g. G2?)

S3 = Vulnerable

S#Q = Questionable taxonomy

S4 = Apparently secure

S#T# = Intraspecific taxa

S5 = Secure

SNR = Unranked

SH = Historic, possibly extirpated

SNA = Not applicable

SX = Presumed extirpated

Migratory species may have separate ranks for different population segments (e.g. S1B, S2N, S4M):

S#B = Rank of breeding population

S#N = Rank of non-breeding population

S#M = Rank of transient population

### COUNT DATA FIELDS

# OF OCCURRENCES: Number of occurrences of a particular element from a county. Column headings are as follows:

E - currently reported from the county

H - reported from the county but not seen for at least 20 years

F - reported from county & cannot be relocated but for which further inventory is needed

X - known to be extirpated from the county

U - reported from a county but cannot be mapped to a quadrangle or exact location.

The data from which the county report is generated is continually updated. The date on which the report was created is in the report footer. Contact KSNPC for a current copy of the report.

Please note that the quantity and quality of data collected by the Kentucky Natural Heritage Program are dependent on the research and observations of many individuals and organizations. In most cases, this information is not the result of comprehensive or site-specific field surveys; many natural areas in Kentucky have never been thoroughly surveyed, and new species of plants and animals are still being discovered. For these reasons, the Kentucky Natural Heritage Program cannot provide a definitive statement on the presence, absence, or condition of biological elements in any part of Kentucky. Heritage reports summarize the existing information known to the Kentucky Natural Heritage Program at the time of the request regarding the biological elements or locations in question. They should never be regarded as final statements on the elements or areas being considered, nor should they be substituted for on-site surveys required for environmental assessments.

KSNPC appreciates the submission of any endangered species data for Kentucky from field observations. For information on data reporting or other data services provided by KSNPC, please contact the Data Manager at:

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County	Taxonomic Group	Scientific name	Common name	Statutes	Ranks	# of Occurrences				
						E	H	F	X	U
Rockcastle	Vascular Plants	<i>Agrimonia gryposepala</i> Rich, moist woods, thickets and woodland borders.	Tall Hairy Groovebur	T /	G5 / S1S2	1	0	0	0	0
Rockcastle	Vascular Plants	<i>Calopogon tuberosus</i> Sphagnous bogs, fens, savannas and wet shores; in KY, dry sandy pine (-oak) woods and swamps..	Grass Pink	E /	G5 / S1	0	1	0	0	0
Rockcastle	Vascular Plants	<i>Carex hystericina</i> SWAMPS, WET MEADOWS, SHORELINES; CALCAREOUS MARSHES (WEAKLEY 1998).	Porcupine Sedge	H /	G5 / SH	0	1	0	0	0
Rockcastle	Vascular Plants	<i>Castilleja coccinea</i> Damp, open sandy or rocky soil in meadows and woodland edges; also, fens, barrens, rock outcrops, meadows, wet pastures, and grassy openings (Weakley 1998); in KY, south-facing limestone slopes.	Scarlet Indian Paintbrush	E /	G5 / S1	1	0	0	0	0
Rockcastle	Vascular Plants	<i>Dryopteris carthusiana</i> ACIDIC, ORGANIC-RICH BOGS, SWAMPS, LESS FREQUENTLY IN MOIST ROCKY RAVINES AND RICH FORESTS (WEAKLEY 1998).	Spinulose Wood Fern	S /	G5 / S3	0	1	0	0	0
Rockcastle	Vascular Plants	<i>Hedeoma hispidum</i> Cedar galde, limestone outcrop, strip mine and other disturbed habitat.	Rough Pennyroyal	T /	G5 / S2	1	0	0	0	0
Rockcastle	Vascular Plants	<i>Juglans cinerea</i> MESIC WOODED RAVINES AND ALONG STREAMS	White Walnut	S / SOMC	G3G4 / S3	1	0	0	0	0
Rockcastle	Vascular Plants	<i>Lilium philadelphicum</i> Openings in seasonally moist forests, prairies and roadsides.	Wood Lily	T /	G5 / S2S3	1	0	0	0	0
Rockcastle	Vascular Plants	<i>Oenothera perennis</i> Dry to moist open ground, open woods, fields, and meadows.	Small Sundrops	E /	G5 / S1S2	0	0	0	1	0
Rockcastle	Vascular Plants	<i>Paxistima canbyi</i> Calcareous rocks and slopes (generally near the top of cliffs or bluffs), rocky woods in the mountains, usually above major streams.	Canby's Mountain-lover	T / SOMC	G2 / S2	1	0	0	0	0
Rockcastle	Vascular Plants	<i>Prenanthes crepidinea</i> Calcareous forests and thickets usually in alluvial areas.	Nodding Rattlesnake-root	T /	G4 / S2	1	0	0	0	0
Rockcastle	Vascular Plants	<i>Spiraea virginiana</i> Riverbanks and boulder/cobble bars that are periodically flood scoured.	Virginia Spiraea	T / LT	G2 / S2	4	0	0	0	0
Rockcastle	Vascular Plants	<i>Vallisneria americana</i> SHALLOW QUIET WATERS AND SHORES.	Eelgrass	S /	G5 / S2S3	1	0	0	0	0
Rockcastle	Vascular Plants	<i>Vitis labrusca</i>	Northern Fox Grape	S /	G5 / S2S3	0	1	0	1	0
Rockcastle	Freshwater Mussels	<i>Alasmidonta atropurpurea</i> Medium-size, low to moderate gradient, high quality streams usually in areas of near zero flow. Occupies interstitial spaces within cobble and or boulder substrate where it is usually partly buried in a sand, gravel, and mud mixture (Harker et al. 1980, Call and Parmalee 1981, Gordon No date).	Cumberland Elktoe	E / LE	G1G2 / S1	1	0	0	0	0
Rockcastle	Freshwater Mussels	<i>Alasmidonta marginata</i> Occurs in large to medium size streams but more typical of smaller streams (Buchanan 1980, Goodrich and Van Der Schalie 1944, Oesch 1984, Parmalee 1967, Wilson and Clark 1914). Sometimes found in lakes connected to rivers. Parmalee (1967) reported the preferred habitat to be small streams with good current sand or gravel bottoms, and depth of several inches to two feet. Buchanan (1980) found this species to be common in gravel and cobble substrate in 2 to 18 inches of water, Neel and Allen (1964) found this species to be more abundant in the mainstream Cumberland River than in small streams.	Elktoe	T / SOMC	G4 / S2	9	3	0	0	0
Rockcastle	Freshwater Mussels	<i>Epioblasma brevidens</i> Medium to large, clear streams and rivers with clean-swept rubble, gravel, and sand substrates (Wilson and Clark 1914, Neel and Allen 1964, Bogan and Parmalee 1983, Ahlstedt 1984 , Gordon no date). Ahlstedt (1984) indicated that E. brevidens remains buried in the substrate except during spawning.	Cumberlandian Combshell	E / LE	G1 / S1	0	0	0	1	0

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Rockcastle	Freshwater Mussels	<i>Lampsilis ovata</i>	Pocketbook	E /	G5 / S1	0	0	1	1	0
		Considered a large river species (Clench and Van Der Schalie 1944, Parmalee 1967, Stansbery 1976), but occurs in medium-sized streams in gravel, sand, or even mud (Parmalee 1967, Johnson 1970, Gordon and Layzer 1989). In the Lower Wabash and Ohio Rivers specimens were taken in deep water (6-10 feet or more) in current from sand or gravel.								
Rockcastle	Freshwater Mussels	<i>Pegias fabula</i>	Littlewing Pearlymussel	E / LE	G1 / S1	10	2	0	0	0
		Small to medium-size streams with cool water. Found in pools and riffles on and sometimes buried in sand and gravel substrate or under large rocks (Bogan and Parmalee 1983, Distefano 1984, Harker et al. 1980, Stansbery 1976, Starnes and Starnes 1980, Wilson and Clark 1914).								
Rockcastle	Freshwater Mussels	<i>Pleurobema oviforme</i>	Tennessee Clubshell	E / SOMC	G2G3 / S1	4	3	3	0	0
		Inhabits small headwater streams and large rivers (e.g., Tennessee and Cumberland Rivers)(Ortmann 1925, Stansbery 1976), but is reported to prefer smaller headwater streams ( Ahlstedt 1984). Present in sand/gravel mixtures and occasionally mud in the vicinity of riffles and shoals, generally in shallow water (Gordon and Layzer 1989).								
Rockcastle	Freshwater Mussels	<i>Ptychobranhus subtentum</i>	Fluted Kidneyshell	E / C	G2G3 / S1	2	1	1	1	0
		Apparently prefers smaller stream and rivers where it occupies clean swept rubble, gravel, and sand substrates in shallow riffles and shoals with moderate to swift current (Ahlstedt 1984, Bogan and Parmalee 1983). Sometimes found buried along sides of boulders and never occurs in standing pools or slack water. Starnes and Bogan (1982) reported this species to be ubiquitous in Little South Fork riffles 10-25 cm deep in all but the swiftest current.								
Rockcastle	Freshwater Mussels	<i>Quadrula cylindrica cylindrica</i>	Rabbitsfoot	T / SOMC	G3T3 / S2	0	0	0	1	0
		SMALL TO LARGE RIVERS WITH SAND, GRAVEL, AND COBBLE AND MODERATE TO SWIFT CURRENT, SOMETIMES IN DEEP WATER (PARMALEE 1967, BOGAN AND PARMALEE 1983).								
Rockcastle	Freshwater Mussels	<i>Toxolasma lividus</i>	Purple Lilliput	E / SOMC	G2 / S1	6	0	2	1	0
		SMALL TO MEDIUM-SIZED STREAMS (GOODRICH AND VAN DER SCHALIE 1944, PARMALEE 1967, STANSBERY 1976, LAURITSEN 1987). PARMALEE (1967) REPORTED ITS OCCURRENCE ON MUD BUT RELATED THAT SAND OR FINE GRAVEL BEDS IN SHALLOW RUNNING WATER WAS THE PREFERRED HABITAT.								
Rockcastle	Freshwater Mussels	<i>Villosa lienosa</i>	Little Spectaclecase	S /	G5 / S3S4	0	0	0	1	0
		INHABITS SMALL TO MEDIUM-SIZED RIVERS, USUALLY IN SHALLOW WATER ON A SAND/MUD/DETRITUS BOTTOM (PARMALEE 1967, GORDON AND LAYZER 1989).								
Rockcastle	Freshwater Mussels	<i>Villosa trabalis</i>	Cumberland Bean	E / LE	G1 / S1	22	6	10	0	0
		SAND OR GRAVEL IN SMALL TO MEDIUM-SIZED STREAMS WITH SLOW TO MODERATE CURRENT, BUT ALSO HISTORICALLY KNOWN FROM BARS IN THE MAINSTREAM CUMBERLAND RIVER (CLARKE 1981, BOGAN AND PARMALEE 1983).								
Rockcastle	Crustaceans	<i>Orconectes australis packardii</i>	Appalachian Cave Crayfish	T /	G4T3 / S2S3	3	3	0	0	0
		SUBTERRANEAN STREAMS AND POOLS (HOBBS 1989).								
Rockcastle	Diplopods	<i>Pseudotremia unca</i>	A Cave Obligate Milliped	T /	G1 / S1S2	0	1	0	0	0
		CAVE OBLIGATE SPECIES.								
Rockcastle	Insects	<i>Dannella provonshai</i>	An Ephemerellid Mayfly	H /	G3G4 / SH	0	1	0	0	0
		STREAMS IN THE OZARK MOUNTAINS AND APPALACHINA PLATEAU (RANDOLPH AND MCCAFFERTY 1998).								
Rockcastle	Insects	<i>Ophiogomphus howei</i>	Pygmy Snaketail	T / SOMC	G3 / S1S2	2	0	0	0	0
		SAND AND GRAVEL IN SWIFTLY FLOWING, UNPOLLUTED AND UNDAMMED RIVERS (CARLE 1987, COOK 1992).								
Rockcastle	Insects	<i>Ophiogomphus mainensis</i>	Maine Snaketail	E /	G4 / S1	0	2	0	0	0
		CLEAR, MODERATELY RAPID ROCKY STREAMS AND RIVERS IN FOREST, OFTEN WHERE THEY DRAIN LAKES OR SWAMPS (DUNKLE 2000).								
Rockcastle	Insects	<i>Stylurus scudderii</i>	Zebra Clubtail	E /	G4 / S1	0	0	0	0	1
		CLEAR FOREST STREAMS AND SMALL RIVERS WITH RIFFLES, A SLOW TO RAPID CURRENT, AND A SAND/MUCK BOTTOM (DUNKLE 2000).								
Rockcastle	Fishes	<i>Etheostoma cinereum</i>	Ashy Darter	S / SOMC	G2G3 / S3	20	1	0	0	0
		Medium-size rivers with slow to moderate current, usually associated with cover (e.g., boulders, snags, detritus)(Branson and Schuster 1983, Comiskey and Etnier 1972, Saylor 1980, Shepard and Burr 1984, Starnes and Etnier 1980). Most often found in pools or eddies near shore.								
Rockcastle	Fishes	<i>Ichthyomyzon greeleyi</i>	Mountain Brook Lamprey	T /	G3G4 / S2	1	0	0	0	0
		CLEAN, CLEAR, SMALL TO MEDIUM-SIZE STREAMS WITH HIGH GRADIENT AND MIXED SAND AND GRAVEL BOTTOMS (BURR AND WARREN 1986). AMMOCOETES LIVE IN LOW GRADIENT AREAS OF THESE STREAMS IN SAND, MUD, AND ORGANIC DEBRIS.								

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Rockcastle	Fishes	<i>Percina squamata</i>	Olive Darter	E / SOMC	G3 / S1	2	0	0	0	0
		Prefers upland streams and rivers with high gradient chutes and deep riffles composed of cobble and boulders (Burr and Warren 1986, Etnier and Starnes 1993). Occasionally in the lower reaches of clean tributaries to rivers (Kuehne and Barbour 1983, Page 1983, Burr and Warren 1986).								
Rockcastle	Fishes	<i>Phenacobius uranops</i>	Stargazing Minnow	S /	G4 / S2S3	0	1	0	0	0
		INHABITS MEDIUM-SIZE STREAMS TO SMALL RIVERS WITH HIGH GRADIENT, PERMANENT FLOW, CLEAR WATER, AND PEBBLE AND GRAVEL SUBSTRATES (BURR AND WARREN 1986).								
Rockcastle	Reptiles	<i>Eumeces anthracinus</i>	Coal Skink	T /	G5 / S2	1	0	0	0	0
		The habitat generally consists of humid wooded areas with abundant leaf litter and loose rocks; often the lizard occurs in the vicinity of springs, swamps, and bogs, but it also inhabits clearcuts, highway and powerline rights-of-way (Hulse et al. 2001), rocky bluffs above creek valleys, dry, rocky, south-facing hillsides (Johnson 2000), and dry shale barrens (West Virginia). Individuals often shelter under logs and rocks near water. Sometimes they take refuge in water. One nest was under a piece of shale (Mount 1975).								
Rockcastle	Breeding Birds	<i>Ammodramus henslowii</i>	Henslow's Sparrow	S / SOMC	G4 / S3B	1	0	0	0	0
		OPEN FIELDS & MEADOWS W/ GRASS INTERSPERSED W/ WEEDS OR SHRUBBY VEG., ESPEC. IN DAMP OR LOW-LYING AREAS, ADJACENT TO SALT MARSH IN SOME AREAS. IN MIGRATION & WINTER ALSO IN GRASSY AREAS ADJACENT TO PINE WOODS OR SECOND-GROWTH WOODS.								
Rockcastle	Mammals	<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	S / SOMC	G3G4 / S3	9	0	0	0	0
		Rafinesque's big-eared bats use a variety of sites for roosting including caves, protected sites along cliffines, old mine portals, abandoned tunnels, cisterns, old or seldom used buildings, etc. Apparently less frequently use tree cavities.								
Rockcastle	Mammals	<i>Corynorhinus townsendii virginianus</i>	Virginia Big-eared Bat	E / LE	G4T2 / S1	3	0	0	0	0
		THE VIRGINIA BIG-EARED BAT IS A CAVE-DWELLING SPECIES THAT HAS BEEN SELDOM REPORTED ANYWHERE BUT IN A CAVE. THE SPECIES WILL USE SMALL ROCKHOUSES AND OTHER PROTECTED SITES ALONG CLIFFLINES, ESPECIALLY FOR SUMMER ROOSTING AND MATERNITY SITES.								
Rockcastle	Mammals	<i>Myotis sodalis</i>	Indiana Bat	E / LE	G2 / S1S2	11	1	0	1	0
		Indiana bats use primarily caves for hibernacula, although they are occasionally found in old mine portals.								
Rockcastle	Communities	<i>Calcareous mesophytic forest</i>		/	GNR / S5	1	0	0	0	0
Rockcastle	Communities	<i>Cumberland plateau gravel/cobble bar</i>		/	GNR / S2	1	0	0	0	0